



December 23, 2013

Regional Water Quality Control Board
11020 Sun Center Drive, #200
Rancho Cordova, CA 95670

Re: Proposed Rescission of NPDES Permit for Tuolumne Utilities District, Order No. R5-2008-0162 and Time Schedule Order R5-2010-0908

Dear Members of the Board:

I am writing on behalf of California Sportfishing Protection Alliance (“CSPA”) in regard to the proposed rescission of the National Pollutant Discharge Elimination System (“NPDES”) permit and associated Time Schedule Order, *Waste Discharge Requirements for Tuolumne Utilities District Sonora Regional Wastewater Treatment Plant and Jamestown Sanitary District Jamestown Wastewater Treatment Plant Tuolumne County*, Order No. R5-2008-0162, NPDES No. CA0084727 (“2008 NPDES Permit”) and Time Schedule Order R5-2010-0908 (“2010 TSO”). The 2008 NPDES Permit and 2010 TSO authorize discharges from the publicly owned treatment works (“POTWs”) owned and operated by the Tuolumne Utilities District’s (“TUD” or “District”).

I. The Tuolumne Utilities District and Its Wastewater Treatment and Disposal Operations

TUD owns and operates the Sonora Regional Wastewater Treatment Plant (“SRWTP”) that serves approximately 25,000 people in the Sonora area of Tuolumne County. The SRWTP discharges an average dry weather flow of 1.3 million gallons per day (MGD) of disinfected secondary wastewater to Quartz Reservoir prior to distribution for reclamation by agricultural end-users. The Jamestown Sanitary District (“JSD”), which owns and operates the JSD Wastewater Treatment Plant, serves approximately 3,000 people and contracts with TUD for its effluent disposal. JSD discharges an average dry weather flow of 0.28 MGD of disinfected secondary wastewater to Quartz Reservoir. The 2008 NPDES Permit and the 2010 TSO authorize the seasonal discharge of disinfected secondary effluent from Quartz Reservoir to Woods Creek from 1 December through 15 May.

The predominant method of wastewater disposal is via the storage and reclamation system owned and operated by the District. Quartz Reservoir is the primary storage infrastructure in the District's reclamation system. Quartz Reservoir is located in a small ravine that empties into Woods Creek. It is estimated that nearly 260,000 gallons per day of wastewater infiltrates to groundwater at Quartz Reservoir. Water that does not infiltrate at Quartz Reservoir is either sold to agricultural end-users, is disposed of on its own sprayfields, seeps beneath the Quartz Reservoir dam to a wetlands complex in the ravine that flows to Woods Creek, or discharged to Woods Creek (due to a lack of storage capacity in Quartz Reservoir during high precipitation years).

II. Regional Board's History of Regulation of TUD's Wastewater Disposal

TUD first obtained an NPDES permit in the late 1970s. "As California experienced several years of drought in the late 70's and early 80's, the Board rescinded the NPDES Permit due to lack of use." *See* TUD's 2001 NPDES Permit (Order No. 5-01-043) at 2.

TUD's POTW and reclamation system has been regulated with waste discharge requirements since at least 1994 (Order Nos. 94-192 and 94-200). From 1995-1999, TUD discharged significant quantities of wastewater from Quartz Reservoir to Woods Creek, which were not authorized under 94-192 or 94-200. In response, the Regional Board issued a Cease and Desist Order No. 5-00-002, which required TUD to develop a contingency plan to prevent unauthorized discharges, and to complete a feasibility study and environmental documents to implement a long-term plan to prevent discharges. 2001 NPDES Permit at 2.

Between 2000 and 2002, the Regional Board conducted numerous inspections of TUD's land disposal and reclamation system infrastructure, including aerial inspections. During these inspections chronic violations of Order No. 94-200 were observed, including discharges to surface waters, discharge of waste onto unpermitted land, and discharge to roadways accessible by the public. Meanwhile, the Regional Board was in the process of revising Order Nos. 94-192 and 94-200, which it ultimately did with the adoption of *Waste Discharge Requirements and Master Reclamation Permit for the Tuolumne Utilities District Wastewater Reclamation System, Tuolumne County*, Order No. R5-2002-0202 ("2002 WDRs"). Concurrent with adoption of the 2002 WDRs, the Regional Board issued another Cease and Desist Order, Order No. R5-2002-0203 ("2002 CDO").

The 2002 CDO required TUD to upgrade its POTW in order to meet Title 22 requirements, including by submitting a Title 22 Engineering Report. 2002 CDO at 4. It also required all end users of TUD supplied wastewater come into compliance with the 2002 WDRs. *Id.* at 4-5. It provided a compliance schedule for two of the larger, more problematic end user areas (Gardella and Rosasco ranches) to achieve compliance. *Id.* Last, the 2002 CDO required TUD to prepare a "Feasibility Study Report" that described and compared various alternatives for achieving long-term compliance with its WDRs. *Id.* at 5.

The 2002 WDRs ordered TUD to develop more robust procedures and requirements that all end users of TUD's wastewater must follow. The Regional Board also order TUD to

complete a groundwater monitoring workplan by 31 May 2003, and a “Background Groundwater Quality Study Report” by 30 May 2005. The Regional Board directed that, when preparing the Background Groundwater Quality Study Report:

[TUD] shall present a summary of monitoring data, calculation of the concentration in background monitoring wells, and comparison of background groundwater quality to that in wells used to monitor Quartz Reservoir, each sensitive storage pond, and each sensitive land application area.

2002 WDR, Provision E.1.h. The 2002 WDRs included numeric groundwater limitations. Groundwater Limitations, D.1(a)-(d). The 2002 WDRs provided that TUD shall report, in conjunction with the Background Groundwater Quality Study Report, whether the background concentrations are statistically greater than the numeric groundwater limitations, and, if so, propose groundwater limitations that comply with Resolution 68-16. 2002 WDR, Provision E.1.h. The 2002 WDRs provided that the

Regional Board shall consider the evidence provided and make a determination regarding whether the [TUD] has justified BPTC and the appropriate final groundwater limitations that comply with Resolution 68-16.

2002 WDR, Provision E.2.

TUD obtained an NPDES Permit in 2001 in order to avoid having “unauthorized” discharges of wastewater to Woods Creek from Quartz Reservoir. TUD represented to the Regional Board, when it applied for the 2001 NPDES Permit, that the permit would only be needed as an interim, short-term measure because TUD anticipated being able to increase its land application capabilities to avoid the need to discharge to Woods Creek. 2001 NPDES Permit, Finding 5.

By 2006, when the 2001 NPDES Permit was set to expire, TUD still had not been able to obtain necessary land and/or agreements with end users to ensure it would not discharge to Woods Creek. Accordingly, it submitted a new application for an NPDES permit. In 2008, the Regional Board issued the current NPDES permit that regulates TUD’s discharges. The 2008 NPDES Permit imposes water quality based effluent limitations (“WQBELs”) for several parameters, including ammonia, copper, and zinc. TUD’s current treatment capabilities are insufficient to reliably meet these WQBELs, and therefore whenever TUD discharges to Woods Creek, it expects to (and does) violate these limits.

Recognizing that it currently cannot meet the WQBELs, TUD requested, and the Regional Board adopted TSO 2010, which provided TUD with four years to expand its wastewater disposal system’s capabilities to direct all discharges to land, and ultimately obtain rescission of its NPDES permit. Specifically the 2010 TSO required the following:

- Submit a workplan and schedule by 1 February 2011;
- Submit Annual Progress Reports annually on 1 July;
- Submit a Report of Waste Discharge for revisions to WDR Order R5-2002-0202 (2002 WDRs) by 1 September 2011;
- Complete the Phase 1 Project described in the TSO by 1 January 2014 (Phase 1 was designed to increase storage and land disposal capacity and included lining Rosasco Pond, installing a dead pool pumping station in Quartz Reservoir, and adding 51 acres of new land disposal areas); and
- Submit request to rescind the 2008 NPDES Permit by 1 January 2014.

III. Rescission Is Inappropriate and Premature as TUD Has Not Completed the Tasks the Regional Board Demanded in Order to Warrant Rescission

In the 2010 TSO, the Regional Board wisely required TUD to make certain specific showings, and accomplish specific tasks, before seeking to rescind its NPDES permit. TUD has failed to accomplish the tasks set forth on the Regional Board's 2010 TSO, which was specifically designed to ensure that TUD's discharge of waste is done in a manner that is protective of water quality. TUD's discharges to land are not in compliance with its WDRs for land disposal (the 2002 WDRs), nor has TUD demonstrated that it has the infrastructure in place to avoid discharges to Woods Creek under all circumstances. To ensure that TUD takes measures to protect both surface water and groundwater, the Regional Board should not rescind TUD's NPDES permit.

A. TUD's Non-compliance with the TSO

To CSPA's knowledge, TUD has failed to meet nearly all the requirements of the TSO. TUD regularly submits late annual reports. TUD has not completed all portions of the Phase 1 Project. TUD has also not submitted a ROWD for revision of the 2002 WDRs. The requirement to obtain revised WDRs is an essential element of the TSO. Without revisiting the 2002 WDRs, the Regional Board will not have had occasion to consider whether increasing land disposal is in fact the preferred environmentally protective means of disposing of TUD's wastewater. Had the ROWD for revisions to the 2002 WDRs been submitted two years ago as required, the Board would have had occasion to carefully evaluate whether the proposal for 100% land disposal could be accomplished by TUD in an environmentally protective manner. Without this information, neither the Board nor TUD is in a position to say with certainty what the best way forward is.

As explained below, TUD has not demonstrated that either it, or the end users of its wastewater, can store and dispose of wastewater on land in a way that protects groundwater. Nor can TUD demonstrate that it has developed land disposal sites sufficient to ensure it will not need to discharge to surface water in the near future. The 2010 TSO established a process for ensuring both these contingencies were met before the NPDES permit was rescinded. As neither contingency has been met, rescission is inappropriate.

B. Non-compliance with the 2002 WDRs

In addition to failing to comply with the 2010 TSO, TUD has failed to comply with the 2002 WDRs, which casts further doubt on any conclusion that rescission of the NPDES Permit is appropriate at this time. In fact, TUD's desire for moving to 100% land disposal system is based on a premise that land disposal is the most "cost-effective" means of disposing of its waste. *See* 2010 TSO, Finding 8 (citing 2009 Feasibility Study prepared by TUD). The 2009 Feasibility Study however has not considered the complete costs, as it relies on the incorrect assumption that TUD is not polluting groundwater.¹ To the contrary, TUD's record of noncompliance with its WDRs demonstrates moving to a complete land disposal system is likely not the most protective, and in any case is premature.

First, the only study of TUD's impact on groundwater undermines any claim that disposal of TUD's wastewater does not negatively impact groundwater. *See* 2009 Background Water Quality Study submitted by Kleinfelder on behalf of TUD ("2009 Kleinfelder Report") (submitted concurrently with these comments as Exhibit A). The 2009 Kleinfelder Report was submitted (nearly four years late) to satisfy TUD's obligation under the 2002 WDRs to assess impacts to groundwater. Though the Background Groundwater Quality Study Report failed entirely to assess the impacts of Quartz Reservoir (despite the requirement that it do so), it did

¹ For example, the 2009 Feasibility Study addresses surface water discharge compliance by acknowledging the likely presence of trihalomethanes and the problems associated with copper and zinc and recommends that clean sampling techniques be used for copper and zinc and source control measures be implemented to reduce the concentrations. The 2009 Feasibility Study further recommends conducting a mixing zone analysis, site-specific objective development and dilution credits for copper and zinc compliance. The 2009 Feasibility Study then states that: "the only remaining alternative would be implementing an advanced side stream treatment process (e.g., reverse osmosis, which is estimated to cost \$2.6 million per MGD capital cost and \$1.3 million per MGD annual operation and maintenance (O&M) cost), which would make surface water not a viable option."

The sampling at the site, based on the transmitted data and the data used to develop the NPDES permit, is quite limited. There is no indication that sampling for copper and zinc was done for dissolved and total fractions. Tertiary treatment systems can be successful at removing significant metals concentrations if they are in the total form. The Discharger's reports also mention that copper sulfate is used in the ponds and could be eliminated to help achieve compliance for a surface discharge and to help eliminate and ground water degradation. While RO would be successful at removing the subject metals, there are local wastewater treatment plants that utilize tertiary treatment then equalize the wastestream to achieve compliance with metals limitations at a significantly lower cost.

On the other hand, if the groundwater below Quartz Reservoir is shown to be degraded and polluted; the costs of the selected alternative would increase substantially. As explained herein, TUD has not made a showing that it is not degrading groundwater below Quartz Reservoir. It is therefore uncertain whether going to a 100% land disposal system is in fact the most cost-effective. Moreover, even if it is allowing TUD to do so without complete consideration of the environmental harms is contrary to the Regional Board's mandate.

assess the impacts of land application in two main land disposal areas. According to the report, the averaged concentrations of chloride, iron, manganese, sodium, coliform, and TDS in all of the downgradient wells on the Gardella site, and chloride, sodium, coliform, and TDS on the Rosasco site, exceeded groundwater limitations set in the 2002 WDRs.²

Further, TUD's position, in each of its monthly reports under the 2002 WDRs, that it is in compliance with the groundwater limitations, is incorrect. In particular, TUD's groundwater monitoring indicate it regularly exceeds the groundwater limitations in the 2002 WDRs for several parameters, including iron and manganese. And though, the 2002 WDRs provide a means by which the Regional Board could take into account background water quality and reset the groundwater limitations, the Regional Board has not done this. Further, if the Regional Board did review TUD's proposed groundwater limits, it would have to conclude that the proposed limitations do not meet the requirements of Porter-Cologne or the State's Antidegradation Policy.³ In any event, no study has been completed to assess its impacts to groundwater at Quartz Reservoir. *See* 2009 Kleinfelder Report at 26 (listing study limitations).

It would be unreasonable to shift TUD's operations to an entirely land disposal system, when the only evidence available indicates that TUD's impacts to groundwater are at best unknown. TUD has not demonstrated it can comply with its land disposal WDRs. Therefore it would be inappropriate for the Regional Board to rescind the 2008 NPDES Permit and force TUD into a regulatory program with which it cannot comply.

C. TUD Cannot Claim It Has the Capacity to Contain All the Wastewater Generates, Thus an NPDES Permit Is Needed

Not only has TUD not met the protective requirements of the 2010 TSO or the 2002 WDRs, TUD cannot state with certainty that it will be able to contain all wastewater with its storage reclamation system, and therefore never discharge to Woods Creek. TUD submitted a water balance to CSPA ("Water Balance"). *See* Exhibit B to these comments. In the Water Balance, TUD acknowledges that "the District could need to discharge [in] March or April 2017." Exhibit B at 4. The District also acknowledges that it does not have enough land application areas in use to ensure no discharge will be necessary in the future. *Id.* at 4. As TUD's

² The report concludes that the Regional Board should be requested to modify the Waste Discharge Requirements to reflect the higher background groundwater quality for several constituents. This request is based on possibly degraded upgradient conditions, not representative of "natural" background water quality and unrepresentative well locations. The report identifies the presence of upgradient mine tailings, however all other upgradient land uses were not discussed. The Regional Board's Basin Plan, Implementation Section, page IV-17.00 defines "background" as "the water quality found upstream or upgradient of the discharge, unaffected by other discharges. The report does not define the "natural" background groundwater quality.

³ *See* footnote 2 above.

history of trying, and failing, to obtain additional disposal areas demonstrates, the Regional Board should not feel confident that TUD will bring the needed land into its program.

In the past the Regional Board has relied, to the detriment of water quality, on TUD's promises to upgrade its system as necessary to avoid discharges. TUD has also regularly and repeatedly missed all the deadlines set for it by the Regional Board. This track record of not delivering on its promises should convince the Regional Board that it should not rely on TUD's promises today. Instead, the Regional Board should demand that TUD demonstrate it has the capacity it needs to avoid discharges under all circumstances before it acts. This is the process established by the 2010 TSO and the Regional Board should not change course now.

IV. Conclusion

While discharges to Woods Creek may be infrequent, it is critical that TUD remain regulated by an NPDES permit. The 2008 NPDES Permit includes measures that TUD must meet to ensure its discharges, when they occur, will not degrade Woods Creek. The NPDES Permit also includes monitoring and reporting requirements that help ensure that if discharges occur, their effects are monitored and appropriate responses, if necessary, can be taken. There may be a time when TUD has demonstrated that a 100% land disposal system is feasible and the most protective of the environment and thus an NPDES Permit is unnecessary. TUD has not made this showing to date, however. The Regional Board should not rescind TUD's NPDES permit.

Sincerely,

A handwritten signature in black ink, appearing to read "Bill Jennings", with a stylized, cursive script.

Bill Jennings, Executive Director
California Sportfishing Protection Alliance